International Appl. No. PCT/GB2003/002889

International Filing Date: July 4, 2003

Page 5 of 12

Amendments to the claims:

This listing of the claims will replace all prior versions and listings of the claims in the application.

Listing of Claims:

- 1. (Currently amended) A device for cleaving an optical fibre, comprising a fixing mechanism <u>configured</u> to fix a fixing element to the optical fibre, and a cleaving mechanism <u>configured</u> to cleave the optical fibre.
- 2. (Currently amended) A device according to claim 1, in which wherein the fixing element comprises a ferrule.
- 3. (Currently amended) A device according to claim 1, wherein or claim 2, in which the fixing element is fixed to the optical fibre such that the fibre extends through the fixing element.
- 4. (Currently amended) A device according to any preceding claim 1, further comprising a hand-held tool.
- 5. (Currently amended) A device according to any preceding claim 1, in which wherein the cleaving mechanism of the device cleaves the fibre when the fixing element has been fixed thereto.
- 6. (Currently amended) A device according to claim 5, in which wherein the cleaving mechanism of the device is able configured to cleave the fibre only when the fixing element has been fixed thereto.

International Appl. No. PCT/GB2003/002889

International Filing Date: July 4, 2003

Page 6 of 12

7. (Currently amended) A device according to any preceding claim 1, in which wherein the fixing mechanism and the cleaving mechanism are arranged such that the fibre is cleaved, and consequently an end face of the fibre is produced, at a preset position along the fibre with respect to the fixing element.

- 8. (Currently amended) A device according to any preceding claim 1, in which wherein the fixing mechanism is a crimping mechanism to crimp the fixing element and thereby fix it to the fibre.
- 9. (Currently amended) A device according to any preceding claim 7, in which wherein the cleaving mechanism cleaves the fibre such that the <u>fibre</u> end face produced is oriented at a non-perpendicular angle with respect to a longitudinal axis of the fibre.
- 10. (Currently amended) A device according to claim 9, in which wherein the fixing mechanism and the cleaving mechanism are mutually arranged such that the fibre end face produced by the cleaving mechanism is at a preset orientation with respect to the fixing element.
- 11. (Currently amended) A device according to claim 10, in which wherein the fixing mechanism includes <u>an</u> orientation determining means arranged to orient the fixing element at a predetermined orientation about the longitudinal axis of the fibre, with respect to the cleaving mechanism.
- 12. (Currently amended) A device according to claim 11, in which wherein the orientation determining means comprises a non-circular orifice arranged to receive the therein a said fixing element therein, the fixing element having a corresponding non-circular cross-section.

International Appl. No. PCT/GB2003/002889

International Filing Date: July 4, 2003

Page 7 of 12

13. (Currently amended) A device according to claim 12, including <u>a</u> first closing

means that closes the non-circular orifice when the device is not in operation.

14. (Currently amended) A device according to any preceding claim 1, including

an aperture by which a separated end portion of the cleaved optical fibre may be removed

from the device.

15. (Currently amended) A device according to claim 13 14, including a second

closing means that closes the aperture when the device is not in operation.

16. (Currently amended) A device according to any preceding claim 1, in which

wherein the fixing mechanism grips the fixing element while the cleaving mechanism cleaves

the fibre.

17. (Currently amended) A device according to any preceding claim 1, in which

wherein the cleaving mechanism includes a clamping mechanism that grips the fibre while

the fibre is cleaved.

18. (Currently amended) A device according to any preceding claim 1, in which

wherein the fibre is placed under tension and/or shear by the cleaving mechanism while the

fibre is cleaved.

19. (Currently amended) A device according to any preceding claim 1, in which

wherein the cleaving mechanism includes an anvil that causes the fibre to be bent while the

fibre is cleaved.

International Appl. No. PCT/GB2003/002889

International Filing Date: July 4, 2003

Page 8 of 12

20. (Currently amended) A device according to any preceding claim 1, in which wherein the cleaving mechanism includes a scoring blade arranged configured to score the fibre, causing and cause a crack to propagate through the fibre, thereby cleaving to cleave the fibre.

- 21. (Currently amended) A device according to claim 21 20, in which wherein the scoring blade is arranged includes a plurality of positions such that for each fibre, or set of fibres that is/are is cleaved by the device, a different one of the plurality of positions position on the blade is used to score the fibre.
- 22. (Currently amended) A device according to any preceding-claim 1, including a lifetime indicator that indicates the number of cleaves that have been made by the device since after a device set-up procedure and/or the number of cleaves remaining for the device [[,]]-preferably-until a device re-set procedure.
- 23. (Currently amended) A device according to any preceding claim 1, which is arranged wherein the device is configured to cleave a plurality of optical fibres substantially simultaneously.
- 24. (Currently amended) A device according to claim 24 23, in which wherein the fixing element comprises a plurality of fixing elements, and wherein the fixing mechanism is arranged configured to fix one or more said of the plurality of fixing elements to said the plurality of optical fibres, preferably substantially simultaneously.
- 25. (Currently amended) A device according to claim 24 or claim 25 23, in which wherein the plurality of optical fibres comprises ribbon fibre.
 - 26. (Canceled)

International Appl. No. PCT/GB2003/002889

International Filing Date: July 4, 2003

Page 9 of 12

- 27. (Currently amended) A device according to any preceding claim 1, having attached thereto comprising a flexibly-positionable neck and clamp for configured to temporarily attaching the device in a convenient working position on a telecoms distribution frame or other apparatus where optical fibres are to be connected.
- 28. (Currently amended) A device according to any preceding claim 1, wherein a connector body holder (ASAH) is attached to the device to hold a connector body (ASA) into which (when present) will be inserted a crimped ferrule and cleaved optical fibre prepared by use of the device.
- 29. (Currently amended) A device according to claim 28, wherein the connector body holder (ASAH) is rotatably attached to the device to enable insertion of a ferrule and fibre into each end of the connector body (ASA), when present, from directions of insertion less than 180 degrees apart, preferebly less than 90 degrees apart, more preferably from substantially the same direction of insertion.
- 30. (Currently amended) A device according to claim 28 or 29, having attached thereto comprising a ferrule assembly holder (CKAH) for configured to hold holding the a ferrule assembly (CKA) of (i) the ferrule and (ii) the fibre to be cleaved and (iii) a ferrule holder, which CKAH wherein the ferrule assembly holder is adapted to hold the CKA ferrule assembly during the a crimp and cleave operation.
- 31. (Currently amended) A device according to claim 30, having comprising a guide means attached thereto, whereby the CKAH wherein the ferrule assembly holder is moveable on a controlled path from the a crimp-and-cleave position to bring the CKA ferrule assembly into alignment with an ASA a connector body when held in the ASAH connector body holder in use, and the CKAH the ferrule assembly holder is then releaseable to enable insertion and locking of the CKA ferrule assembly into the ASA connector body.

International Appl. No. PCT/GB2003/002889

International Filing Date: July 4, 2003

Page 10 of 12

- 32. (Currently amended) A device according to claim 30 or 31, wherein the ferrule assembly holder is a succession of suitably shaped and arranged ferrule assemblies, and wherein the CKAH ferrule assembly holder carries a re-useable resiliently-compressible member for insertion configured to be inserted into [[a]] succession of suitably shaped and arranged CKAs ferrule assemblies, between the end of the ferrule and the a facing internal end of the ferrule holder, to compensate resiliently for cleaved fibre length tolerance variations during insertion of the CKAs ferrule assemblies into ASAs connector bodies held in the ASAH in use connector body holder, and the said compressible member is removable from the CKAs ferrule assemblies after insertion and locking of the CKAs ferrule assemblies into the ASAs connector bodies.
- 33. (Currently amended) A device according to claim 32, wherein the said compressible member is attached to the CKAH ferrule assembly holder by a flexible member of sufficient length and flexibility to permit release of the CKA ferrule assembly from the CKAH ferrule assembly holder and insertion and locking of the CKA ferrule assembly into the ASA connector body held in the ASAH connector body holder in use[[,]] while the compressible member is in place in the CKA ferrule assembly.
- 34. (Currently amended) A device according to claim 33, wherein <u>further</u> comprising retraction means are provided for retracting the flexible member after removal of the said compressible member from the CKA <u>ferrule assembly</u>, thereby to re-position the compressible member on the CKAH <u>ferrule assembly holder</u> ready for insertion into the next CKA ferrule assembly.
- 35. (Currently amended) A device according to claim 28, further comprising a of 29 having attached thereto securing means attached thereto for directly securing the ferrule and the fibre during and after the a crimp and cleave operation in the absence of any separate ferrule holder.

International Appl. No. PCT/GB2003/002889

International Filing Date: July 4, 2003

Page 11 of 12

36. (Currently amended) A device according to claim 35 having further comprising a transfer means attached thereto whereby configured such that the securing means and the secured crimped ferrule and cleaved fibre can be moved, preferably and guided by a guide means attached to the device, (i) to bring the ferrule and fibre from the a crimp-and-cleave position into alignment with an ASA connector body when held in the ASAH connector body holder in use and (ii) to insert the ferrule and fibre into the ASA connector body in the in a required orientation with or without a keying formation on the ferrule, the securing means being releasable after the ferrule has been fixed in the ASA connector body in the required orientation.

37. (Cancelled)

- 38. (Currently amended) A method of coupling optical fibres using a device according to claim 36, including the steps of comprising a fixing mechanism configured to fix a fixing element to an optical fibre, and a cleaving mechanism configured to cleave the optical fibre, the method comprising:
- (a) directly securing a ferrule and a fibre in <u>a</u> the said securing means during and after the <u>a</u> crimp and cleave operation in the absence of any separate ferrule holder,
- (b) moving the secured crimped ferrule and cleaved fibre (i) to bring the ferrule and fibre from the crimp-and-cleave position into alignment with an ASA a connector body when held in the ASAH a connector body holder in use and (ii) to insert the ferrule and fibre into the ASA connector body in the in a required orientation with or without a keying formation on the ferrule,
- (c) fixing the ferrule and fibre in the ASA connector body in the required orientation, and then
 - (d) releasing the securing means.